

APPROVED

for

PTO DEPOSIT ACCOUNT CHARGE
ACCOUNT#04-1700

Express Mail No. EV447408734US

Deposited on: 06/25/2004

DUNLAP, CODDING & ROGERS, P.C.

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

PTO/SB/21 (08-00)

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

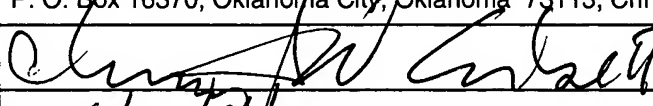
| | |
|------------------------|-----------------------|
| Application Number | 10/697,461 |
| Filing Date | 10/30/2003 |
| First Named Inventor | Martin A. Cotton |
| Group Art Unit | 2829 (Conf. No. 7982) |
| Examiner Name | K. Cuneo |
| Attorney Docket Number | 8245.061 |

Total Number of Pages in This Submission

ENCLOSURES (check all that apply)

| | | |
|--|---|---|
| <input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): See remarks below: |
| Remarks 1. Transmittal (1 page); 2. Fee Transmittal (1 page) authorizing withdrawal from Deposit Account should any fees be required; 3. Supplemental Information Disclosure Statement (5 pages); 4. Supplemental Form PTO-1449 (2 pages); 5. Copies of cited material; and 6. Return Receipt Postcard. | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | |
|-------------------------|---|
| Firm or Individual name | DUNLAP, CODDING & ROGERS, P.C., Customer Number 30589 P. O. Box 16370, Oklahoma City, Oklahoma 73113; Christopher W. Corbett |
| Signature |  |
| Date | 6/25/04 |

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail or U.S. Express mail no. EV447408734US in an envelope addressed to the address below on this date: 06/25/2004

| | |
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| Typed or printed name | Christopher W. Corbett, Reg. No. 36,109 |
| Signature |  |

Date

6/25/04

SEND TO: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPROVED

for

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EV447408734US

PTO DEPOSIT ACCOUNT CHARGE

Date Deposited:

06/25/2004

ACCOUNT#04-1700

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

DUNLAP, CODDING & ROGERS, P.C.

FREE TRANSMITTAL for FY 2004

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 0

Complete if Known

| | |
|----------------------|------------------|
| Application Number | 10/697.461 |
| Filing Date | 10/30/2003 |
| First Named Inventor | Martin A. Cotton |
| Examiner Name | K. Cuneo |
| Art Unit | 2829 |
| Attorney Docket No. | 8245.061 |

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account:Deposit
Account
Number
Deposit
Account
Name

04-1700

Dunlap, Coddling & Rogers, P.C.

Customer No. 30589

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|-------------------------------|-------------------------------|------------------------|----------|
| 1001 770 | 2001 385 | Utility filing fee | |
| 1002 340 | 2002 170 | Design filing fee | |
| 1003 530 | 2003 265 | Plant filing fee | |
| 1004 770 | 2004 385 | Reissue filing fee | |
| 1005 160 | 2005 80 | Provisional filing fee | |

SUBTOTAL (1) (\$) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Total Claims | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| Independent Claims | | | \$0 |
| Multiple Dependent | | | \$0 |

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description |
|-------------------------------|-------------------------------|--|
| 1202 18 | 2202 9 | Claims in excess of 20 |
| 1201 86 | 2201 43 | Independent claims in excess of 3 |
| 1203 290 | 2203 145 | Multiple dependent claim, if not paid |
| 1204 86 | 2204 43 | ** Reissue independent claims over original patent |
| 1205 18 | 2205 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

| Fee Code (\$) | Fee Code (\$) | Fee Description | Fee Paid |
|---------------|---------------|--|----------|
| 1051 130 | 2051 65 | Surcharge - late filing fee or oath | |
| 1052 50 | 2052 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 130 | 1053 130 | Non-English specification | |
| 1812 2,520 | 1812 2,520 | For filing a request for <i>ex parte</i> reexamination | |
| 1804 920* | 1804 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 1,840* | 1805 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 110 | 2251 55 | Extension for reply within first month | |
| 1252 420 | 2252 210 | Extension for reply within second month | |
| 1253 950 | 2253 475 | Extension for reply within third month | |
| 1254 1,480 | 2254 740 | Extension for reply within fourth month | |
| 1255 2,010 | 2255 1,005 | Extension for reply within fifth month | |
| 1401 330 | 2401 165 | Notice of Appeal | |
| 1402 330 | 2402 165 | Filing a brief in support of an appeal | |
| 1403 290 | 2403 145 | Request for oral hearing | |
| 1451 1,510 | 1451 1,510 | Petition to institute a public use proceeding | |
| 1452 110 | 2452 55 | Petition to revive - unavoidable | |
| 1453 1,330 | 2453 665 | Petition to revive - unintentional | |
| 1501 1,330 | 2501 665 | Utility issue fee (or reissue) | |
| 1502 480 | 2502 240 | Design issue fee | |
| 1503 640 | 2503 320 | Plant issue fee | |
| 1460 130 | 1460 130 | Petitions to the Commissioner | |
| 1807 50 | 1807 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 180 | 1806 180 | Submission of Information Disclosure Stmt | |
| 8021 40 | 8021 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 770 | 2809 385 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 770 | 2810 385 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 770 | 2801 385 | Request for Continued Examination (RCE) | |
| 1802 900 | 1802 900 | Request for expedited examination of a design application | |

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)

Christopher W. Corbett

Registration No.
(Attorney/Agent)

36,109

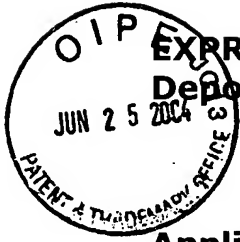
Telephone (405) 607-8600

Signature

Date

06/25/2004

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450



EXPRESS MAIL NO.: EV447408734US

Deposited On: June 25, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/697,461 Confirmation No.: 7982
Applicant(s) : Martin A. Cotton
Filed : 10/30/2003
TC/A.U. : 2829
Examiner : K. Cuneo
Title : NON-CIRCULAR MICOR-VIA

Docket No. : 8245.061
Customer No. : 30589

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

**List of Sections Forming Part of This
Information Disclosure Statement**

The following sections are being submitted for this Information Disclosure Statement:

1. ☒ Preliminary Statements
2. ☒ FORM PTO-1449 (Modified)
3. ☒ Statement as to Information Not Found in Patents or Publications
4. ☐ Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
5. ☐ Cumulative Patents or Publications

- 6. ☒ Copies of Listed Information Items Accompanying this Statement
- 7. ☐ Concise Explanation of Non-English Language Listed Information Items
 - 7A. ☐ EPO Search Report
 - 7B. ☐ English Language Version
- 8. ☐ Translation(s) of Non-English Language Documents
- 9. ☐ Concise Explanation of English Language Listed Information Items (Optional)
- 10. ☒ Identification of Person(s) Making this Information Disclosure Statement

Section 1. Preliminary Statements

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Section 2. Form PTO-1449 (Modified)

- ☒ A completed Form 1449 (Modified) is attached hereto.
- ☐ No Form 1449 (Modified) is attached.

Section 3. Statement as to Information Not Found in Patents or Publications (Information Not Listed in Form PTO-1449)

The present invention relates generally to a method of mineralizing air contaminants by oxidation, and more particularly, but not by way of limitation, to an improved method of removing contaminants from an air stream by passing the air stream through an ultra-low density, UV-accessible aerogel photocatalyst.

Section 4. Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted

This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application Serial No. _____, filed on _____ (date).

(complete the following, if applicable)

[] This application also relies, under 35 U.S.C. 120, on the earlier filing date of prior application Serial No. _____, filed on _____ (date).

The following references were submitted to, and/or cited by, the Office in the prior application(s) and therefore, are not required to be provided in this application:

Section 5. Cumulative Patents or Publications

STATEMENT

_____ is cumulative of the following patents or publications listed on Form PTO-1449:

In accordance with 37 C.F.R. § 1.98(c), a copy of only ____ is being submitted with this Information Disclosure Statement.

Section 6. Copies of Listed Information Items Accompanying this Statement

Legible copies of all items listed in Form PTO-1449 (Modified) accompany this information disclosure statement.

☐ Exception(s) to above:

☐ Items in prior application from which an earlier filing date is claimed for this application, as identified in Section 4.

☐ Cumulative patents or publications identified in Section 5.

Section 7. Concise Explanation of Non-English Language Listed Information Items

Section 7A. Concise Explanation of Non-English Language Listed Information Items - EPO Search Report

The relevance with respect to the following citations listed on Form PTO-1449:

is submitted on the basis of accompanying:

(check the appropriate item)

☐ EPO search report that is in the English language,

☐ EPO search report that is not in the English language and that is accompanied also by an English language version of the EPO search report,

that issued on the corresponding European patent application.

Section 7B. Concise Explanation of Non-English Language Listed Information Items - English Language Version of EPO Search Report

Section 8. Translation(s) of Non-English Language Documents

☐ Submitted herewith is an English translation of the following foreign language patents, publications or information or of those portions of those patents, publications or information considered to be material:

(complete the following, if applicable)

- ☐ No English language translations of the foreign language parents, publications or information or parts thereof are readily available, except for those listed above.
- ☐ The following foreign language documents submitted are believed to be the equivalent or substantial equivalent of the English language documents identified below, which are also submitted herewith.

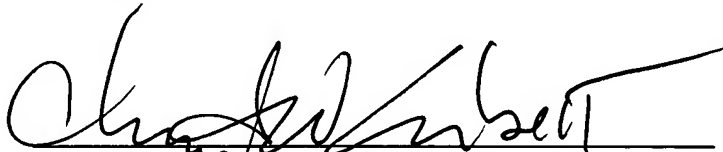
Section 9. Concise Explanation of English Language Listed Information Items (OPTIONAL)

Section 10. Identification of Person(s) Making this INFORMATION DISCLOSURE STATEMENT

The person making this statement is the attorney who signs below on the basis of the information:

- ☐ supplied by the inventor(s)
- ☐ supplied by an individual associated with the filing and prosecution of this application (37 C.F.R. § 1.56(c)).
- ☒ in the attorney's file
- ☐ provided in the International Search Report cited herein

Respectfully submitted,



Christopher W. Corbett, Reg. No. 36,109
DUNLAP, CODDING & ROGERS, P.C.
P.O. Box 16370
Oklahoma City, Oklahoma 73113
(405) 607-8600 - telephone
(405) 607-8686 - telefax
Agent for Applicant

Express Mail: EV447408734US

Date Deposited: 06/25/2004

Substitute for form 1449A/PTO

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT BY****APPLICANT**

Use as many sheets as necessary)

| Complete if Known | |
|------------------------|-----------------------|
| Application Number | 10/697,461 |
| Filing Date | 10/30/2003 |
| First Named Inventor | Martin A. Cotton |
| Group Art Unit | 2829 (Conf. No. 7982) |
| Examiner Name | K. Cuneo |
| Attorney Docket Number | 8245.061 |

U. S. PATENT DOCUMENTS

| EXAM INIT. | Cite No. 1 | U.S. PATENT NUMBER Number | Kind Code ² (if known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM- DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|---------------|---------------|------------------------------|--------------------------------------|--|---|--|
| | | 3799802 | | Schneble, Jr., et al. | 03/26/1974 | |
| | | 5347086 | | Potter et al. | 09/13/1994 | |
| | | 5414222 | | Sen et al. | 05/09/1995 | |
| | | 5442144 | | Chen et al. | 08/15/1995 | |
| | | 5426399 | | Matsubayashi et al. | 06/20/1995 | |
| | | 5522132 | | Mattei | 06/04/1996 | |
| | | 5724727 | | Chopra et al. | 03/10/1998 | |
| | | 5734560 | | Kamperman et al. | 03/31/1998 | |
| | | 6486394 | | Schmidt et al. | 11/26/2002 | |
| | | | | | | |

FOREIGN PATENT DOCUMENTS

| EXAM INIT. | Cite No. 1 | Foreign Patent Document | | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines Lines, Where Relevant Passages or Relevant Figures Appear | T ⁵ |
|---------------|------------------|-------------------------|----------|--------------------------------------|--|--|---|----------------|
| | | Office 3 | Number 4 | Kind Code ⁵ (if known) | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

U.S. and Foreign: ¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). ⁴Form Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

| | | |
|--|--|---|
| EXAM INIT. | | PATENT DOCUMENTS |
| | | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published |
| | | |
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| | | |
| Non Patent Documents: ¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached. | | |
| Examiner Signature: | | Date Considered: |
| EXAMINER: Initial if citation considered, whether or not citation is in conformance and not considered. Include copy of this form with next communication to applicant. **Place of Publication refers to name of publication in which the information was published. | | |

8245.061 Sup Form 1449.wpd